



Monday, May 11, 2020

Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500
SDG ID: GCF91177
Sample ID#s: CF91177 - CF91179

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

May 11, 2020

SDG I.D.: GCF91177

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CF91177	SW DISCHARGE
TRIP BLANK 1	CF91178	SW DISCHARGE
TRIP BLANK 2	CF91179	SW DISCHARGE



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Analysis Report

May 11, 2020

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SW DISCHARGE
Location Code: AECOME-GULF
Rush Request: 72 Hour
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/06/20
05/07/20

Time

15:10
15:36

Laboratory Data

SDG ID: GCF91177
Phoenix ID: CF91177

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: OUTFALL 003

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	05/08/20	MSF	EPA 1664
pH	7.20	1.00	pH Units	1	05/07/20 21:46	AP/EG	SM4500-H B-11
Total Suspended Solids	36	5.0	mg/L	1	05/07/20	ARG	SM 2540D-11
Semi-Volatile Extraction	Completed				05/07/20	P/AK	SW3520C

Aromatic Volatiles w/Napthalene

Benzene	ND	1.0	ug/L	1	05/07/20	MH	E624.1
Napthalene	ND	1.0	ug/L	1	05/07/20	MH	E624.1

QA/QC Surrogates

% 1,2-dichlorobenzene-d4	101		%	1	05/07/20	MH	70 - 130 %
% Bromofluorobenzene	90		%	1	05/07/20	MH	70 - 130 %
% Dibromofluoromethane	107		%	1	05/07/20	MH	70 - 130 %
% Toluene-d8	93		%	1	05/07/20	MH	70 - 130 %

Semivolatiles by SIM, PAH

Benzo(a)pyrene	ND	0.10	ug/L	1	05/08/20	WB	E625.1
Napthalene	ND	0.50	ug/L	1	05/08/20	WB	E625.1

QA/QC Surrogates

% 2-Fluorobiphenyl	52		%	1	05/08/20	WB	40 - 140 %
% Nitrobenzene-d5	64		%	1	05/08/20	WB	40 - 140 %
% Terphenyl-d14	25		%	1	05/08/20	WB	40 - 140 %

3

Client ID: OUTFALL 003

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
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3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

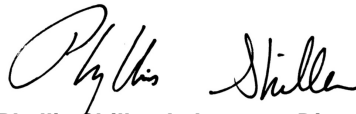
Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Semi-Volatile Comment:

Poor surrogate recovery was observed for one surrogate. The other surrogates associated with this sample were within QA/QC criteria. No significant bias suspected.

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Phyllis Shiller, Laboratory Director

May 11, 2020

Reviewed and Released by: Phyllis Shiller, Laboratory Director



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Analysis Report

May 11, 2020

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SW DISCHARGE
Location Code: AECOME-GULF
Rush Request: 72 Hour
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/06/20

Time

15:36

05/07/20

Laboratory Data

SDG ID: GCF91177
Phoenix ID: CF91178

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: TRIP BLANK 1

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Aromatic Volatiles w/Napthalene</u>							
Benzene	ND	1.0	ug/L	1	05/07/20	MH	E624.1
Napthalene	ND	1.0	ug/L	1	05/07/20	MH	E624.1
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	101		%	1	05/07/20	MH	70 - 130 %
% Bromofluorobenzene	90		%	1	05/07/20	MH	70 - 130 %
% Dibromofluoromethane	104		%	1	05/07/20	MH	70 - 130 %
% Toluene-d8	104		%	1	05/07/20	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

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Phyllis Shiller, Laboratory Director

May 11, 2020

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Analysis Report

May 11, 2020

FOR: Attn: Ms. Jennifer Atkins
AECOM
250 Apollo Drive
Chelmsford, MA 01824

Sample Information

Matrix: SW DISCHARGE
Location Code: AECOME-GULF
Rush Request: 72 Hour
P.O.#: 112185

Custody Information

Collected by:
Received by: CP
Analyzed by: see "By" below

Date

05/06/20

Time

15:36

05/07/20

Laboratory Data

SDG ID: GCF91177
Phoenix ID: CF91179

Project ID: GULF CHELSEA TERMINAL 60597375-0500
Client ID: TRIP BLANK 2

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	By	Reference
<u>Aromatic Volatiles w/Napthalene</u>							
Benzene	ND	1.0	ug/L	1	05/07/20	MH	E624.1
Naphthalene	ND	1.0	ug/L	1	05/07/20	MH	E624.1
<u>QA/QC Surrogates</u>							
% 1,2-dichlorobenzene-d4	100		%	1	05/07/20	MH	70 - 130 %
% Bromofluorobenzene	91		%	1	05/07/20	MH	70 - 130 %
% Dibromofluoromethane	91		%	1	05/07/20	MH	70 - 130 %
% Toluene-d8	93		%	1	05/07/20	MH	70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level
QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

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Phyllis Shiller, Laboratory Director

May 11, 2020

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QA/QC Report

May 11, 2020

QA/QC Data

SDG I.D.: GCF91177

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 529196 (mg/L), QC Sample No: CF90840 (CF91177)													
Oil and Grease by EPA 1664A	BRL	1.4				97.0	96.0	1.0				85 - 115	20
Comment:													
Additional: MS acceptance range 75-125%.													
QA/QC Batch 529239 (pH), QC Sample No: CF90840 (CF91177)													
pH			6.77	6.74	0.40	99.1						85 - 115	20
Comment:													
Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.													
QA/QC Batch 529152 (mg/L), QC Sample No: CF91071 (CF91177)													
Total Suspended Solids	BRL	2.5	54	58	7.10	90.0						85 - 115	



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QA/QC Report

May 11, 2020

QA/QC Data

SDG I.D.: GCF91177

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 529109 (ug/L), QC Sample No: CF91387 (CF91177)										
<u>Semivolatiles by SIM, PAH</u>										
Benzo(a)pyrene	ND	0.02	67	69	2.9				40 - 140	20
Naphthalene	ND	0.50	43	45	4.5				40 - 140	20
% 2-Fluorobiphenyl	43	%	49	53	7.8				40 - 140	20
% Nitrobenzene-d5	41	%	55	57	3.6				40 - 140	20
% Terphenyl-d14	54	%	54	54	0.0				40 - 140	20

Comment:

Additional 8270 criteria: 10% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 10-110%, for soils 30-130%)

QA/QC Batch 529214 (ug/L), QC Sample No: CF90010 (CF91177, CF91178, CF91179)

Volatiles


Benzene	ND	0.70	103	88	15.7	117	105	10.8	65 - 135	20
Naphthalene	ND	1.0	101	94	7.2	108	102	5.7	70 - 130	30
% 1,2-dichlorobenzene-d4	101	%	101	100	1.0	100	102	2.0	70 - 130	30
% Bromofluorobenzene	91	%	93	93	0.0	94	93	1.1	70 - 130	30
% Dibromofluoromethane	106	%	87	103	16.8	93	103	10.2	70 - 130	30
% Toluene-d8	105	%	94	94	0.0	94	100	6.2	70 - 130	30

Comment:

A blank MS/MSD was analyzed with this batch.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate
NC - No Criteria
Intf - Interference


Phyllis Shiller, Laboratory Director
May 11, 2020

Monday, May 11, 2020

Criteria: None

State: MA

Sample Criteria Exceedances Report

GCF91177 - AECOME-GULF

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



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Analysis Comments

May 11, 2020

SDG I.D.: GCF91177

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



Project: Gulf Chelsea Terminal / 60597375-0500
Report to: Jennifer Atkins
Invoice to: AECOM
QUOTE # **AE012319RM**

Client Sample - Information - Identification

Sampler's
 Signature Ar / [Signature]
 Date: 5-6-20

Matrix Code:
 DW=Drinking Water GW=Ground Water SW=Surface Water WW=Waste Water
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe OIL=Oil
 B=Bulk L=Liquid

PHOENIX USE ONLY	SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
	01177	Outfall 003	SW	5-6-20	1510
	01178	Trip Blank 1			
	01179	Trip Blank 2			

[illegible]

* Please run TSS for 3 Day TAT.

Furnaround:

☐ 1 Day*

☐ 2 Days*

☐ 3 Days*

☒ Standard

☐ Other

*** SURCHARGE APPLIES**

See previous page

☐ Other

State where samples were collected: MA

*** SURCHARGE APPLIES**

Coolant: IPK ☒ ICE ☐

Cooler: Yes ☒ No ☐

Temp $\left\{ \begin{array}{l} \text{C} \\ \text{F} \end{array} \right.$ Pg of

Data Delivery/Contact Options:

Fax:	Phone:	Email:
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Project P.O: 112185

This section MUST be completed with Bottle Quantities.

Analysis Request

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
SE=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe **OIL**=Oil
B=Bulk **L**=Liquid

PHOENIX USE ONLY	SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled
	01177	Outfall 003	SW	5-6-20	1510
	01178	Trip Blank 1			
	01179	Trip Blank 2			

[illegible]

* Please run TSS for 3 Day TAT.

Furnaround:

☐ 1 Day*

☐ 2 Days*

☐ 3 Days*

☒ Standard

☐ Other

*** SURCHARGE APPLIES**

See previous page

☐ Other

State where samples were collected: MA

*** SURCHARGE APPLIES**